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(54) Support plate for gas burners made of one whole metallic block.

(57) The instant invention concerns a support plate for gas burners made in one whole metallic block.

Once inserted in a top (the upper part of the cooking surface) which is fitted to kitchen furniture or to built-in units, it is possible to pair the nozzle-holder and the Venturi to the lower part of the plate itself and the flame separator to the upper part, on top of which saucepans or the like can be directly put using brackets set at the sides of the flame.

Their function substitutes that of normal grids.

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### Support plate for gas burners made of one whole metallic block.

The object in question in this application for patent for an industrial utility model is a support plate for gas burners made of one whole metallic block.

Once fitted to a top (the upper part of the cooking surface) which is fitted to kitchen furniture or to built-in units it is possible to pair the nozzle-holder and the Venturi to the lower part of the plate itself and the flame separator to the upper part, on top of which saucepans or the like can be directly put using brackets set at the sides of the flame.

Their function substitutes that of normal grids.

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The importance of the instant invention lies in the extent to which it profoundly alters production ideas, which had became standardized, thus attaining revolutionary results with regard to aesthetic effect, functionality, economy, and simplicity of design.

In other words, thanks to this invention, the insertion of gas burners into kitchen furniture or built-in units/become easier and more advantaveous.

Firstly, it must be said that, up until now, if both gas burners and electric plates were to be fitted into a kitchen unit it was necessary to have different tops due to the fact that their different structure made it impossible to insert them together into a single standardized top.

Instead, with the instant invention, a single top is sufficient since the mounting for the gas burners is the same in shape and size as the electric plate at the coupling and fastening point on the top.

The advantages arising from this are obvious.

In addition to the creation of a most striking aesthetic impression owing to the structural affinity of the components, the expenses involved in the production of the tops and their stocking can be considerably reduced.

In addition to this, it should be pointed out that up until now, in order to hold the saucepans above the flame, it was necessary to place a grid on top of the gas flame in a somewhat precarious manner.

On the contrary, with the said invention, it is even possible to do without the grid, given that its function as a stand for saucepans or the like is here delegated to the brackets which are an integral part

of the support plate itself.

These brackets, above all, guarantee a high degree of safety when in use, in that, being an integral part of the plate itself, they prevent the saucepans from moving, as they sometimes do on grids which have been sum marily fixed or simply placed on the top.

Furthemore, contrary to what happens to the majority of normal grids which, especially after prolonged use, tend to bend, the brackets in question do not allow a particularly heavy saucepan to get any closer to the flame than the distance precisely stated in the regulations.

These regulations were laid down to ensure that the reduced distance between the flame and the object above it does not cause, in addition to a poor burning action, a dangerous formation of carbon monoxide.

Moreover, regarding the positioning of the components involved in the lighting and use of the flame, the instant invention presents notable advantages in comparison with the one we are used to seeing.

It is well-known, in fact, that in order for the nozzle-holder, which sometimes also incorporates the Venturi, to be correctly positioned in relation to the top, it has to be anchored to a sleeper underlying the top itself, which is usually fitted to a part of the unit.

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Instead, with the instant invention, whereas before the nozzle-holder was anchored to the supporting sleeper, now, in the sameway it may be attached directly to the gas-burners support.

This means a further saving in that it is now possible to do without the sleeper which was previously needed.

The special characteristics of the instant invention, the main advantages of which have already been clearly stated in terms of functionality and economy will became evident from the following description.

The accompanying drawings show only one embodiment of this invention, in which:

- fig. 1 illustrates in perspective the support for gas burners according to said invention:
- fig. 2 is a plan view of the underside of the support for gas burners according to said invention;
- fig. 3 is a section of the diametrical plane A-A in fig. 2.
- Using the said drawings as a point of reference, the invention consists of a circular plate or platform made of metal, the whole of which is indicated by the number (1).

Along the edge of its upper side are 4 radial brackets (2).

These are upright, arranged in sets of 2, protruding from the base, and are intended to support the saucepans during cooking.

Naturally, such support brackets (2) may be modelled according to the

30 most varied aesthetic requirements in the same way that instead of being
moulded in one single piece with the support (1) they may be built in,
bearing in mind that it is necessary to move them for cleaning or to
change them; this is suggested in fig. 1.

On a circumference that rings the middle of the upper side there lies a raised, concentric, annular band (4).

Its dimensions are equal to those of the flame separator (5) which it will support, and it is provided with internal centering and stop notches

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to receive the same number of corresponding projections (6a) provided around the edge of the flame separator itself so as to ensure a perfect fit.

In the central part of the support plate (1) is a circular area which is raised and tapered with a central hole (8).

This is designed to receive the Venturi and to let the gas into the firebox, the sides of the firebox being delimited by the annular band (4) while it is closed from above by the flame separator (5).

Again, with reference to the plate (1) the presence of 2 holes (3a) must be mentioned; positioned between the raised area (7) and the annular band (4) they will have to receive two through screws (3b), the function of which will be to anchor the Venturi to the underside of the plate itself.

In accordance with the instant invention, around the perimeter of the lower side of the support plate there projects a rim (9) which exactly fits inside the raised edge of the hole made in the plate of the top (11).

This rim, besides having a purely aesthetic function in relation to the finish, also accomplishes the task of centering and coupling with the aforesaid raised edge.

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Still on the underside of the support plate (1) lobes are provided, into each of which threaded dead holes have been cut.

Threaded screws can be screwed into them through plaques or equivalent means in order to stabilize and ultimately fix the plate to the top (11).

The instant invention, as mentioned above, may be built in a top, to be then attached to kitchen furniture or built-in units taking the precaution, if necessary, to mount it on a reflecting and/or insulating layer.

This avoids unexpected transmissions of heat to the top itself and to the inside of the unit supporting the top.

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In conclusion, it must be pointed out that the entire preceding description and the accompanying drawings refer to a preferred version and show only one embodiment of the instant invention.

5 There is nothing to prevent additional or complementary ideas being applied to the invention.

For example, just to quote a few, in place of the screws, the adaption of a quicker and simpler system of coupling the support plate to the top in order to facilitate maintenance and cleaning; the addition of an electronic lighting device beside the flame separator; the appropriate structuring of the firebox in order to cause the Venturi effect to take place automatically; or, finally, different basic shaping of the support plate itself in accordance with the most varied demands or preferences.

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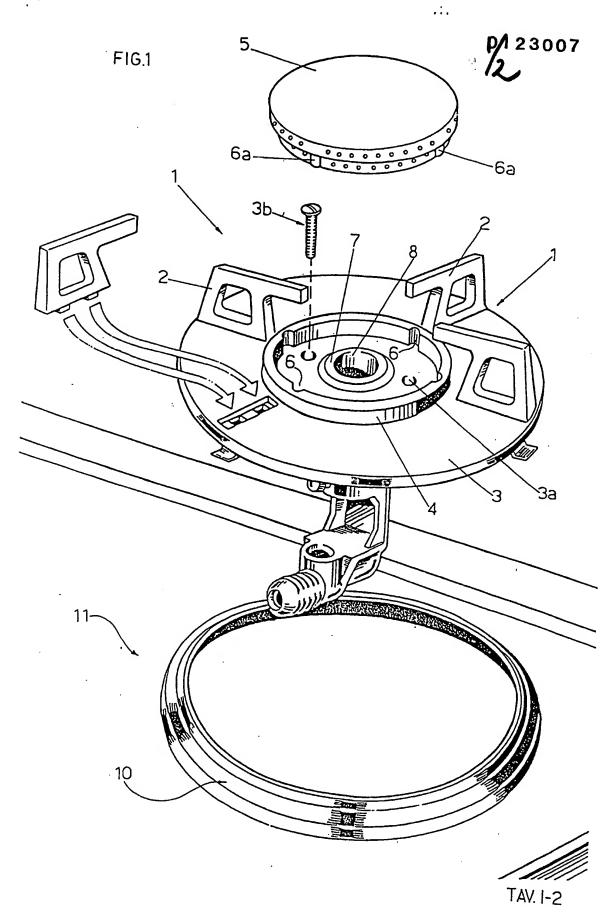
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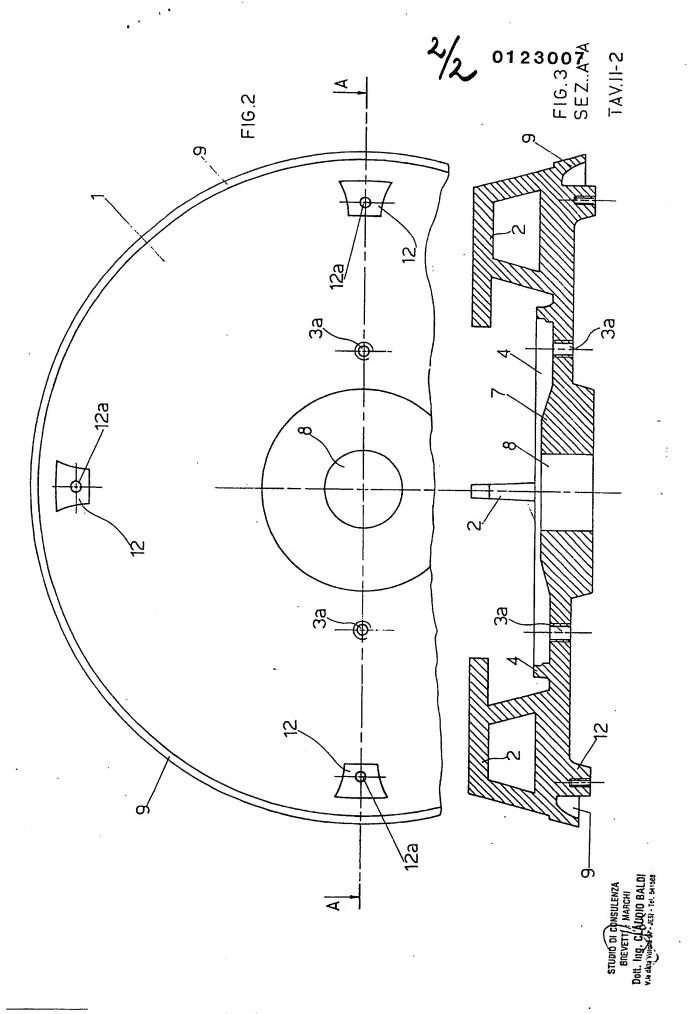
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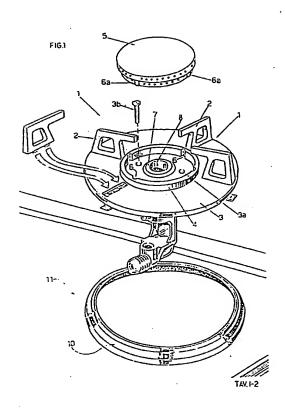
- 1) Support plate for a gas burner characterized by the fact that it is made up of one whole metallic block. In the preferred version of the instant invention it is circular in shape and possesses an upper side from which there are spread out from the outer edge to the centre the following:
- support brackets, designed to carry saucepans or the like during cooking. These have the faculty to be an integral part of the plate, or to be detachable, according to requirements;
- a raised concentric annular band positioned on a circumference that rings the middle of the plate, the function of which is to hold the flame separator. It bears internal centering stop notches, designed to receive the same number of corresponding projections provided around the edge of the flame separator. These ensure a perfect fit between the two elements and thus create an efficient firebox;
- a circular area which is raised and tapered with a central hole designed to receive the Venturi and let the gas into the firebox;
  - -two holes situated between the raised area and the aforementioned annular band designed to receive two through screws which will serve to anchor the Venturi to the underside of the support plate in question; a plate which is characterized on its underside by the presence of a protruding edge around its entire perimeter. This edge is designed to exactly encircle the inside of the raised rim of the hole made in the plate of the upper part of the cooking-surface, to which the plate may be paired. The underside of the plate is also characterized by some lobes into each of which threaded dead holes have been cut. Threaded screws
  - be paired. The underside of the plate is also characterized by some lo into each of which threaded dead holes have been cut. Threaded screws can be screwed into them through plaques or equivalent means in order to stabilize and ultimately fix the plate to the top.

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